ELSEVIER

Contents lists available at ScienceDirect

## European Economic Review

journal homepage: www.elsevier.com/locate/eer



# Debt, inflation and central bank independence



### Fernando M. Martin

Federal Reserve Bank of St. Louis. United States

#### ARTICLE INFO

Article history: Received 2 March 2015 Accepted 17 July 2015 Available online 4 August 2015

IEL classification:

E52

E58 E61

E62

Keywords:
Government debt
Inflation
Deficit
Central bank independence
Time-consistency
Inflation targeting

#### ABSTRACT

Increasing the independence of a central bank from political influence, although ex-ante socially beneficial and initially successful in reducing inflation, would ultimately fail to lower inflation permanently. The smaller anticipated policy distortions implemented by a more independent central bank would induce the fiscal authority to decrease current distortions by increasing the deficit. Over time, inflation would increase to accommodate a higher public debt. By contrast, imposing a strict inflation target would lower inflation permanently and insulate the primary deficit from political distortions.

© 2015 Elsevier B.V. All rights reserved.

#### 1. Introduction

Concern over political influence on the conduct of monetary policy is an important element in the design of government institutions. A widely held belief is that having an independent central bank, protected from the pressures of political expediency, is conducive to low inflation, as suggested by long-run correlations found in cross-country studies.<sup>1</sup>

Following the seminal contributions of Kydland and Prescott (1977), Barro and Gordon (1983) and Rogoff (1985), central bank independence is viewed primarily as a means to mitigate an inflation bias that may arise under discretionary policy. This classic argument, however, ignores the role played by the fiscal authority in ultimately shaping the overall policy response to institutional reform. As I shall argue below, due to the interaction of fiscal and monetary policies, increasing central bank independence, although ex-ante socially beneficial and initially successful, would ultimately fail to lower long-run inflation.

E-mail address: martinbcra@gmail.com

<sup>&</sup>lt;sup>1</sup> See Alesina and Summers (1993), Campillo and Miron (1997), Walsh (2008) and Waller (2011). Although the correlation is a well-established fact, the evidence on causality is mixed. In Section 4.6, I describe the empirical literature in detail and connect it to the results in this paper.

<sup>&</sup>lt;sup>2</sup> See Lohmann (1992), Waller (1992), Walsh (1995) and Svensson (1997).

<sup>&</sup>lt;sup>3</sup> Notable exceptions that incorporate some elements of fiscal policy to Rogoff's framework are Adam and Bili (2008) who assume fiscal policy is passive in the sense of Leeper (1991), and Niemann (2011) who assumes the fiscal authority is myopic. There is also an earlier literature on noncooperative fiscal and monetary policies (e.g., Alesina and Tabellini, 1987; Dixit and Lambertini, 2003) that abstracts from public debt, which is key for the mechanism described in this paper.

Consider an economy in which public spending is higher than what is socially optimal. Assuming monetary policy is somewhat accommodative to fiscal conditions, an expenditure bias implies inefficiently high inflation. A potentially beneficial institutional reform would be to insulate the conduct of monetary policy from political distortions by making the central bank's objectives more aligned with the preferences of private agents. After the reform, the central bank would be less willing to monetize the deficit, which would lead to a drop in inflation.

The fiscal authority would understand that, for any level of debt it decided to pass on, future monetary policy distortions would be lower when facing a more independent central bank. Since it is desirable to smooth policy distortions intertemporally (see Barro, 1979), an increase in central bank independence, which lowers future distortions for any given current policy, would provide the fiscal authority with incentives to decrease current distortions in exchange for higher future distortions. Specifically, there would be a decrease in current taxation, i.e., an increase in the deficit, which in turn, raises future distortions due to the financial burden of a larger accumulated debt. As long as the central bank remained somewhat accommodative, inflation would rise as debt increased, gradually reversing the initial effects of the reform.

Instead, if the central bank were to adhere to a monetary policy rule independent of the level of debt (e.g., a strict inflation target), then the fiscal authority would not be able to use its debt choice to affect future monetary policy distortions. In other words, the lack of monetary policy accommodation to fiscal conditions removes the mechanism through which the fiscal authority would want to trade off distortions intertemporally. As a consequence, the level of debt is kept constant and permanently lower inflation and deficit are achieved.

In this paper, I formalize the arguments presented above and provide theoretical and quantitative assessments of the effects of central bank independence. I study this issue in the context of a monetary economy based on the environment by Lagos and Wright (2005), with the addition of a government that uses distortionary taxes, money and nominal bonds to finance the provision of a valued public good. At the beginning of each period, two authorities choose government policy simultaneously: the central bank determines the money growth rate independently of the fiscal authority, which decides on taxes and expenditure; public debt evolves to satisfy the consolidated government budget constraint. Both authorities lack the ability to commit to policy choices beyond the current period. Policymakers care about the welfare of private agents, but, in addition, derive a political rent, which increases with the level of public expenditure. The existence of these political frictions can be motivated, for example, by a drive towards empire-building, the presence of a self-serving bureaucracy or the practice of patronage, all of which provide incentives for a larger government.

Government policy is determined by the interaction of three forces: distortion-smoothing, a time-consistency problem and political disagreement. The incentive to smooth distortions intertemporally follows the classic arguments in Barro (1979) and Lucas and Stokey (1983). Time-consistency problems arise from the interaction between debt and monetary policy, as analyzed in Martin (2009, 2011, 2013) for the case when policy is implemented by a single benevolent unit: how much debt the government inherits affects its monetary policy since inflation reduces the real value of nominal liabilities; in turn, the anticipated response of future monetary policy affects the current demand for money and bonds, and thereby how the government today internalizes policy trade-offs. Political disagreement appears whenever the fiscal and monetary authorities derive different political rents from government spending.<sup>4</sup>

A convenient starting point for the analysis is a situation in which both authorities value the political rent equally, i.e., in which the central bank is fully influenced by the fiscal authority or, equivalently, captive to the same extent by political considerations. The degree of central bank independence is thus measured by how much the monetary authority disagrees with the fiscal authority on the value of the political rent. I focus on reforms that make the central bank value political rents less than the fiscal authority. Hence, a more independent central bank is a more benevolent monetary authority, one whose policy objectives are more aligned with private agents' preferences. In the terminology adopted by the literature, the central bank as modeled here always enjoys instrument independence, i.e., the ability to freely set policy in the pursuit of its objective, and the reforms I study involve further endowing it with goal independence, i.e., the capacity to determine its policy objective with limited influence from the fiscal authority.<sup>5</sup>

In the absence of political disagreement, the fiscal and monetary authorities behave as a single decision unit. Thus, granting the central bank instrument independence is not alone sufficient to trigger changes in policy. That is, an effective institutional reform requires endowing the central bank with both instrument and goal independence. Furthermore, when starting at the discretionary steady state, endowing the government with the ability to commit to all future decisions does not affect policy either. Instead, a reform that makes the central bank more independent from political distortions, i.e., more benevolent than the fiscal authority, improves social welfare and has implications for fiscal and monetary policies. In the short run, the reform leads to a drop in inflation and an increase in the primary deficit. These effects may be persistent, but in the long run, the accumulation of public debt induces an increase in inflation, back to around its original level. The results are thus consistent with the widespread belief that central bank reform leads to lower inflation, but do not support the hypothesis that independence by itself is conducive to *permanently* lower inflation.

The response of the fiscal authority to institutional reform is critical to account for the full policy dynamics just described. If the fiscal authority were not to revise its policy when facing a more independent central bank, the rise in debt

<sup>&</sup>lt;sup>4</sup> More generally, government authorities would disagree on desired policy whenever they each internalize policy distortions differently.

<sup>&</sup>lt;sup>5</sup> For a discussion of instrument and goal independence, see Grilli et al. (1991) and Debelle and Fischer (1994)

<sup>&</sup>lt;sup>6</sup> This result generalizes the findings in Martin (2011). See Proposition 1 in Section 3.5 below and the surrounding discussion. Note that there is still a role for institutional reform since the government, regardless of commitment power, is not benevolent.

## Download English Version:

# https://daneshyari.com/en/article/5066624

Download Persian Version:

https://daneshyari.com/article/5066624

<u>Daneshyari.com</u>